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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,452	07/27/2001	Zhigang Liu	NC17236 (NOK102-17236)	8743
30973	7590	12/22/2004	EXAMINER	
SCHEEF & STONE, L.L.P. 5956 SHERRY LANE SUITE 1400 DALLAS, TX 75225			PHILLIPS, HASSAN A	
			ART UNIT	PAPER NUMBER
			2151	

DATE MAILED: 12/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/916,452

Applicant(s)

LIU ET AL.

Examiner

Hassan Phillips

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/29/02.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The Information Disclosure Statement filed August 29, 2002 has been received and considered by the Examiner.

Drawings

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show components (i.e. decompressor 38, or compressor 42), and details of operation (i.e. Fig.'s 2-4) as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawings, MPEP § 608.02(d).

2. The drawings are further objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include reference sign(s) mentioned in the description: (i.e. 24, 34, 48, etc.). They also include reference character(s) not mentioned in the description: (i.e. 102, 104, 106, 112, 122, etc.).

3. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure

number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 7-12, 16-18, are rejected under 35 U.S.C. 102(b) as being anticipated by Storer, U.S. Patent 4,876,541.

3. In considering claims 1 and 16, Storer teaches a communication system and method comprising: A first dictionary content deletion selector 28, coupled to the first-

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station dictionary device 22, said first dictionary content deletion selector for selecting which, if any, portion of the dictionary content stored at the first-station dictionary device is to be deleted, selection made by said first dictionary content deletion selector responsive at least to an indication of additional dictionary content to be added to the first-station dictionary device. See col. 9, line 56 through col. 10, line 5.

4. In considering claim 7, Storer teaches the first-station dictionary device comprising a FIFO (first-in, first-out)-structured memory device and wherein the dictionary content, if any, selected by said first dictionary content deletion selector to be deleted comprises first-in dictionary content. See col. 9, line 56 through col. 10, line 5.

5. In considering claim 8, Storer teaches the first-in dictionary content selected to be deleted in amounts corresponding to amounts for the additional dictionary content indicated to be added to the first-station dictionary device. See col. 17, lines 58-61.

6. In considering claim 9, Storer teaches the first-station dictionary device being embodied at an entity having both a compressor for compressing an outgoing protocol signal originated at the first communication station and a decompressor for decompressing an incoming message originated at the second communication station, wherein the first-station dictionary device is coupled to both the compressor and the decompressor, and wherein the indication of the additional dictionary content responsive to which said first dictionary content deletion selector makes the selection,

includes additional dictionary content associated with either incoming and outgoing messages. See col. 1, lines 5-8. Also see col. 9, line 56 through col. 10, line 5.

7. In considering claim 10, Storer teaches the first-station dictionary device being embodied at an entity having a compressor for compressing an outgoing protocol signal originated at the first communication station, wherein the first-station dictionary device includes a first portion coupled to the compressor, and wherein the indication of the additional dictionary content responsive to which the said first dictionary content deletion selector makes the selection includes additional dictionary content associated with the outgoing protocol signal. See col. 1, lines 5-8. Also see col. 9, line 56 through col. 10, line 5.

8. In considering claim 11, Storer teaches the entity at which the first-station dictionary device is embodied further having a decompressor for decompressing an incoming protocol signal originated at a second communication station, wherein the first-station dictionary device further includes a second portion coupled to the decompressor, and wherein the indication of the additional dictionary content responsive to which said first dictionary content deletion selector makes the selection includes additional dictionary content associated with the incoming protocol signal. See col. 1, lines 5-8. Also see col. 9, line 56 through col. 10, line 5.

9. In considering claims 12 and 18, the teachings of Storer provide a means for a second dictionary content deletion selector coupled to a second-station dictionary device, said second dictionary content deletion selector for selecting which, if any, portion of the dictionary content stored at the second-station dictionary device is to be deleted, selection made by said second dictionary content deletion selector responsive at least to an indication of additional dictionary content to be added to the second station dictionary device. See col. 1, lines 5-8. Also see col. 9, line 56 through col. 10, line 5.

10. In considering claim 17, Storer further teaches deleting the portion of the dictionary content stored at the first-station dictionary device selected during the operation of selecting. See col. 9, line 56 through col. 10, line 5.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2-6, are rejected under 35 U.S.C. 103(a) as being unpatentable over Storer in view of Yabe, U.S. Patent 6,490,669.

3. In considering claim 2, although the system of Storer shows substantial features of the claimed invention, it fails to show indicating the size of additional content to be added to the dictionary device.

Nevertheless, in a similar field of endeavor, Yabe teaches a system for compressing data comprising: an indication of the indicia size of additional content to be added to a dictionary device 2. See col. 5, lines 8-29.

Thus, given the teachings of Yabe it would have been apparent to one of ordinary skill in the art to modify the teachings of Storer in order to have an indication of indicia size of additional dictionary content to be added to the first-station dictionary device. This would have provided an efficient means for expanding bandwidth and thereby improving signaling between communication systems, Yabe col. 3, lines 7-45.

4. In considering claim 3, the teachings of Storer provide a means for the indicia to be defined in terms of byte size. See col. 18, lines 5-16.

5. In considering claim 4, the teachings of Storer provide a means for the indicia to be defined in terms of byte size, and the selection to be made by the first dictionary content deletion selector responsive to an indication of the byte sizes of the dictionary content stored at the first-station dictionary device. See col. 18, lines 5-16. Also see col. 9, line 56 through col. 10, line 5.

6. In considering claim 5, Storer teaches the first-station dictionary device comprising a memory element at which the dictionary content is stored, wherein the memory element exhibits a memory capacity definable in terms of bytes, and wherein the indication of the byte sizes of the dictionary content stored at the first-station dictionary device is representative of the memory capacity of the memory element less the byte sizes of the dictionary content stored at the first-station dictionary device. See col. 9, line 56 through col. 10, line 5. Also see col. 18, lines 5-16.

7. In considering claim 6, the teachings of Storer provide a means for the first dictionary content deletion selector to further determine, responsive to the indication of the dictionary content stored at the first-station dictionary device and to the indication of the additional dictionary content to be added to the first-station dictionary device whether memory capacity is available at the memory element of the first-station dictionary device and, responsive thereto, for selecting which, if any, portion of the dictionary content stored at the first-station dictionary device is to be deleted.. See col. 18, lines 5-16. Also see col. 9, line 56 through col. 10, line 5.

8. Claims 13, 14, 19, 20, are rejected under 35 U.S.C. 103(a) as being unpatentable over Storer in view of Benayoun et al. (hereinafter Benayoun), U.S. Patent 6,415,061.

9. In considering claims 13 and 19, although the system of Storer shows substantial features of the claimed invention, it fails to show a first and second dictionary content deletion selector synchronously operable during a communication session.

Nevertheless, in a similar field of endeavor, Benayoun teaches a method for updating dictionaries in a data transmission system comprising: a first dictionary content deletion selector and a second content deletion selector synchronously operable during a communication session during which a signaling protocol is effectuated between a first communication station and a second communication station. See col. 2, lines 42-67.

Thus, given the teachings of Benayoun it would have been obvious to one of ordinary skill in the art to modify the teachings of Storer in order to have a first dictionary content deletion selector and a second content deletion selector synchronously operable during a communication session during which a signaling protocol is effectuated between a first communication station and a second communication station. This would have provided an efficient means for updating the separate dictionaries during a communication session, without significantly decreasing the compression ratio, Benayoun col. 2, lines 38-41.

10. In considering claims 14 and 20, Benayoun teaches the first dictionary content deletion selector and said second dictionary content deletion selector being implicitly synchronously operable during the communication session, free of explicit

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signaling there between separate from the signaling protocol. See col. 2, lines 42-67.

One of ordinary skill in the art would combine the teachings of Storer with Benayoun for the reasons indicated in consideration of claims 13 and 19.

11. Claim 15, is rejected under 35 U.S.C. 103(a) as being unpatentable over Storer in view of Schmid et al. (hereinafter Schmid) U.S. Patent 6,735,291.

12. In considering claim 15, although the system of Storer shows substantial features of the claimed invention, it fails to teach sequence numbers being provided for the additional dictionary content.

Nevertheless, in a similar field of endeavor Schmid teaches a system and method utilizing telephony resources comprising: utilizing a selected signaling protocol to effectuate signaling between a first communication station and a second communication station wherein a first signaling protocol message, and at least a second signaling protocol message originated at the second communication station and sent to the first communications station, are identified by sequence numbers. See col. 6, lines 28-41.

Furthermore, utilizing sequence numbers in messages were well known in the art at the time of the present invention. Thus, given the teachings of Schmid it would have been obvious to one of ordinary skill in the art to modify the teachings of Storer to have messages identified by sequence numbers, and the selection made by the first dictionary content deletion selector being responsive to the sequence number of the

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additional dictionary content. This would have provided an efficient and error-proof means for accurately deleting the appropriate content from the dictionaries at the first and second communication stations, Schmid col. 6, lines 33-36.

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Benveniste et al., U.S. Patent 6,349,372 discloses a system and method for storing compressed and uncompressed data segments.

Harvell, U.S. Patent 5,831,558 discloses a method of compressing and decompressing data in a computer system by encoding data using a data dictionary.

Onodera, U.S. Patent 5,907,638 discloses a method, system and apparatus for compressing data.

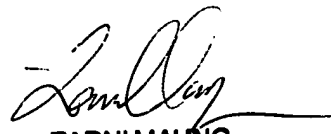
2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hassan Phillips whose telephone number is (571) 272-3940. The examiner can normally be reached on M-F 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HP/
12/7/04



ZARNI MAUNG
PRIMARY EXAMINER